AD/A-005 565

BIBLIOGRAPHY OF SOVIET MATERIAL ON INTERNAL WAVES. APRIL - DECEMBER 1974

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Prepared for:

Defense Advanced Research Projects Agency Navy Foreign Language Services

27 January 1975

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| TYPE OF REPORT & PERIOD COVERED |
| Scientific . , . Interim |
| 6. PERFORMING ORG. REPORT NUMBER |
| S. CONTRACT OR GRANT NUTLER(s) |
| N00600 75-C-0018 |
| 10. PROGRAM ELEMENT, PHOJECT, TASK AREA & WORK UNIT NUMBERS |
| DARPA Order No. 2790 |
| Program Code No. L13003 |
| 12. HEPONT DATE January 27, 1975 |
| 13. NUMBER OF PAGES |
| 18. SECURITY CLASS. (of this corport) |
| |
| UNCLASSIFIED |
| 184. DECLASSIFICATION DOWNGRADING |
| |

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IS. SUPPLEMENTARY NOTES

Scientific . . . Interim

19 KEY WORDS (Continue on reverse side if necessery and identify by block number)

Internal Waves
Capillary Waves
Surface Signature
Turbulent Flow
Ocean Microstructure

20 ABSTRACT (Continue on reverse side if necessary and identify by block number)

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An index of serial source abbreviations is appended.

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No. 3, April - December 1974

Sponsored by

Defense Advanced Research Projects Agency

DARPA Order No. 2790

ARPA Order No. 2790

Program Code No. 113003

Name of Confector:
fuformatics fnc.

Effective Date of Contract
July 1, 1974

Contract Expiration Date:
June 30, 1975

Amount of Contract: \$306, 023

Contract No. N00600-75-C-0018
Principal investigator
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Short Title of Work.
"Internal Waves"

This research was supported by the Defense Advanced Research Projects Agency and was monitored by the U. S. Navy Foreign fanguage Service under Contract No. Nt0600-75-C-0018. The publication of this report does not constitute approval by any government organization or informatics line, of the inferences, findings, and conclusions contained fictein. It is published solely for the exchange and stimulation of ideas,

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INTRODUCTION

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An index of serial source abbreviations is appended.

- 1. Abuzyarov, Z. K. Operational method of forecasting wave conditions in the North Atlantic Ocean. IN: Tr. Gidrometeorol. n.-i. tsentr SSSR, no. 127, 1973, 51-61. (RZhGeofiz, 7/74, #7V82)
- Abuzyarov, Z. K., and Yu. I. Shamrayev. Morskiye gidrologicheskiye informatsii i prognozy (Marine hydrological information and forecasting). (Textbook for hydrometeorological technical schools). Leningrad, gidrometeoizdat, 1974, 219 p. (KL, 35/74, #29234)
- 3. Agulykov, A. V. <u>Spatial turbulent jet.</u> IN: Sb. Prikl. i teor. fiziks, Vyp. 5, Alma-Ata, 1973, 256-263. (RZhMekh, 10/74, #10B1189)
- 4. Akatnov, N. I. <u>Linear scales of turbulence in a semiempirical theory</u>. MZhiG, no. 3, 1974, 53-57.
- 5. Akhmedov, T. Kh., and A. I. Kvasov. <u>Possibilities for applying laser optical methods for image analysis in the study of turbulent flows</u>. IN: Sb. Probl. gidroenerg. i vod. kh-va. Vyp. 11, Alma-Ata, Nauka, 1974, 150-157. (RZhMekh, 8/74, #8B958)
- 6. Akustika okeana (Acoustics of the ocean). Moskva, Nauka, 1974, 694, p. (RBL, 8/74, #243)
- 7. Aleksandrov, L. D., Ye. M. Belozerova, and M. I. Burdukovskiy.

 <u>Towed unit for underwater surveying</u>. Other izobr, no. 16, 1974, #426217.
- 8. Andryushchenko, B. F. Some parameters of the anisotropic process of horizontal turbulent diffusion of nonstationary dye spots in the shelf zone of the Black Sea (from aerial data). IN: Sb. Materialy Vses. simpoz. po izuchennosti Chern. i Sredizemn. morey, ispol'z. i okhrane ikh resursov, Sevastopol', 1973. Ch. l. Kiyev, Nauk. dumka, 1973, 23-26. (RZhMekh, 4/74, #4B595)

- 9. Anuchin, V. N., V. P. Petrov, Yu. G. Pyrkin, B. I. Samolyubov, and P. M. Stepunin. Near-bottom density currents in the estuarial region of the Danube River. VMU, no. 2, 1974, 244-246.
- 10. Avanesov, G. A., I. V. Barinov, and V. D. Glazkov. Multispectral scanning system in an airborne experiment for studying the earth's resources. Meteorologiya i gidrologiya, no. 4, 1974, 30-36.
- 11. Averbukh, A. Z. Force acting upon a deformable body during its slow motion in a viscous incompressible fluid. VMU. Materiatika i mekhanika, no. 3, 1974, 87-93.
- 12. Babayev, A. E. Action of an internal pressure wave upon a rigid spherical cavity. PM, v. 10, no. 8, 1974, 50-55.
- 13. Babenko, K. I., and N. D. Vvedenskaya. <u>Calculation of pressure and vortex at a boundary, from numerical solution of a boundary value problem for the Napier-Stokes equations.</u> IN: Tr. IV Vses. seminara po chislen. metodam mekh. vyazk. zhidkosti, Riga, 1972. Novosibirsk, 1973, 126-133. (RZhMekh, 7/74, #7B645)
- 14. Barablin, N. N., and A. G. Razuvayev. <u>Construction of a new universal curve in turbulent jet flows.</u> IN: Uch. zap. gor'kov. un-t. Ser. Mekhanika, no. 2, 1973, 29-32. (RZhMekh, 7/74, #7B917)
- 15. Badkin, Yu. V., and Yu. I. Faddeyev. <u>Calculation of potential flow</u>
 characteristics in cases of motion of deformable bodies in a fluid. Trudy
 LKI, no. 84, 1973, 3-6. (RZhMekh, 10/74, #10B549)
- Belozerov, B. S. <u>Water waves (Cauchy-Poisson problems)</u>. IN: Sb. Mat., nekotoryye eye prilozh. i metodika prepodavaniya. Rostov-na-Donu, 1973, 84-86. (RZhMekh, 8/74, #8B542)

- 17. Belozerov, V. A. On the problem of wave motion of an incompressible viscous fluid. Mos. oblastnoy ped. inst. Sbornik nauchnykh trudov. gidromekhanika, no. 2, 1973, 167-171.
- 18. Belyayev, V. S., A. S. Monin, and R. V. Ozmidov. A thousand spectra of ocean turbulence. DAN SSSR. v. 217, no. 5, 1974, 1053-1056.
- 19. Belyayev, V. S., A. S. Monin, R. V. Ozmidov, and V. T. Paka.

 Experimental study of small-scale turbulence in the ocean. FAiO,
 no. 9, 1974, 959-975.
- 20. Belyayev, V. S., A. S. Monin, and V. T. Paka. Experimental measurements of deep-sea turbulence. FAiO, no. 5, 1974, 533-542.
- 21. Belyayev, V. S., R. V. Ozmidov, and M. L. Pyzhevich. Empirical laws for one-dimensional spectral density distributions of velocity and electrical conductivity pulsation in the ocean. Okeanologiva, no. 5, 1974, 802-805.
- 22. Benilov, A. Yu., and M. M. Zaslavskiy. <u>Determining wave and turbulent components of random hydrodynamic fields of the near-water atmospheric layer</u>. FAiO, no. 6, 1974, 628-635.
- 23. Bespalov, A. A., N. Ye. Kuznetsov, V. V. Naumova, and V. D. Rusin.

 Recording system for space-time characteristics of surface wave

 disturbances. VMU, no. 4, 1974, 406-410.
- 24. Bezuglov, V. A., G. Ya. Vasilevskis, and Yu. A. Shcherbina. Effect of flow deformation on turbulent diffusion of an admixture. IN: Tr. 18-y Nauch. konf. Mosk. fiz.-tekhn. in-t, 1972. Ser. Aeromekhanika. Protsessy upr. Dolgoprudnyy, 1973, 25-30. (RZhMekh, 4/74, #4B1047)

- 25. Bogatyr', B. N. Estimation of calculation accuracy for averaged curves of vertical distribution of oceanological parameters. Trudy A ANII, no. 315. Leningrad, 1974, 100-108.
- 26. Bol'shakov, E. A. and V. I. Saplin. <u>Determining the phasor of a radio signal reflected from a statistically rough surface</u>. Trudy Taganrog radiot, in-ta., no. 39, 1973, 27-31. (RZhF, 8/74, #8Zh212)
- 27. Borisenko, Yu. D., and Yu. Z. Miropol'skiy. Effect of nonlinearity on statistical distributions of internal waves in the ocean. Okeanologiya, no. 5, 1974, 788-796.
- 28. Borisenkov, Ye. P., and V. V. Pankratov. Some results of numerical experiments with a small-parameter model of circulation in a baroclinic ocean with variable bottom relief. Trudy AANII, no 315, Leningrad, 1974, 58-68.
- 29. Brekhovskikh, L. M. (ed.). Akustika okeana. (Acoustics of the ocean). Moskva, Nauka, 1974, 694 p. (KL, 42/74, #35687).
- 30. Brekhovskikh, L. M., and A. Kh. Khrgian. Forum of meteorologists and oceanologists. VAN, no. 8, 1974, 82-84.
- 31. Burtsev, G. A. Theory of the magnetic field of sea waves in a finitedepth sea. GiA, no. 3, 1974, 516-521.
- 32. Byutner, E. K. Vzaimodeystviye turbulentnogo potoka s poverkhnost'yu, pokrytoy dvizhushchimsya prepyatstviyami (<u>Interaction between turbulent flow and a surface covered by moving obstacles).</u> Moskva, 1974, 15 p. (RZhGeofiz, 7/74, #7V61)
- 33. Chusov, M. A. On the relaxation mechanism of furbulent stress of friction. FAiO, no. 10, 1974, 1031-1040.

- 34. Davidan, I. N., T. A. Pasechnik, and V. A. Rozhkov. <u>Determining</u> components of a wave energy balance equation in a spectral form, and some results of model calculations of probability characteristics of wave conditions. Trudy GOIN, no. 122, 1974, 59-78. (RZhMekh, 10/74, #10B602).
- 35. Dera, Y., Z. Klusek, and M. Brzozowska. Selected topics on physics of the sea. Part '. Underwater sound scattering on a rough sea surface.

 Postepy fizyki, v. 25, no. 2, 1974, 175-191.
- 36. Desnyanskiy, V. N., and Ye. A. Novikov. Modeling of cascade processes in turbulent currents. PMM, v. 38, 1974, 507-513.
- 37. Dmitriyev, A. A. (ed). Fizika morya i atmosfery (Physics of the sea and atmosphere). Moskva, Nauka, 1974, 97 p. (KL, 36/74, #30155)
- 38. Dobroklonskiy, S. V. <u>Time dependence of a Stokes wave current.</u> FAiO, no. 5, 1974, 546-551.
- 39. Doronin, Yu. P., S. B. Balyasnikov, and L. N. Karlin. Mathematical modeling of thermocline formation as a result of interaction between the atmosphere and ocean. Trudy AANII, no. 315, Leningrad, 1974, 69-75.
- 40. Druzhinina, G. Z., and E. Ye. Libin. <u>Determination of frequency and damping coefficient of gravity waves in a finite-depth viscous fluid.</u> IN: Tr. NII prikl. mat. i mekh. pri Tomsk. un-te, no. 2, 1973, 63-66. (RZhMekh, 5/74, #5B429)
- 41. Fel'zenbaum, A. I. A method for calculation of flow velocity, temperature and salinity fields in the ocean. DAN SSSR. v. 217, no. 1, 1974, 79-82.

- 42. Fuks, I. M. Spectral width of signals scattered by a wavy sea surface.

 Akusticheskiy zhurnal, no. 3, 1974, 458-468.
- 43. Gabov, S. A. <u>Diffraction of a Kelvin wave at a semiinfinite wall.</u> DAN SSSR. v. 217, no. 2, 1974, 299-302.
- 44. Garnaker'yan, A. A., A. S. Sosunov, and V. T. Lobach. Coherent and incoherent components of a radio signal reflected from an isotropic sea surface with a quasiharmonic correlation function. Trudy Taganrog r-t in-ta, no. 39, 1973, 3-7. (RZhF, 6/74, #6Zhl48)
- 45. Garnich, N. G., and Yu. Z. Miropol'skiy. Some characteristics of the fine thermal structure of the ocean. Okeanologiya, no. 4, 1974, 595.
- 46. Genin, L. G., T. Ye. Krasnoshchekova, S. P. Manchkha, and V. G. Sviridov. "Energy" balance of temperature pulsations in turbulent current in a pipe. Trudy MEI, no. 179, 1974, 155-165. (RZhMekh, 8/74, #8B947)
- 47. Gidrofizicheskiye i gidroopticheskiye issledovaniya v Atlanticheskom i Tikhom okeanakh (<u>Hydrophysical and hydrooptical studies in the Atlantic and Pacific Oceans</u>). Moskva, Nauka, 1974, 328 p. (RBL, 8/74, #269)
- 48. Gik, L. D., V. N. Nekuryashchev, and L. I. Tret'yakov. <u>Aberration</u> reduction in synthetic aperture acoustic holograms. IAN SO SSSR.

 Avtometriya, no. 2, 1974, 63-67.
- 49. Gol'dberg, Z. A. Nonlinear resonant phenomena in the case of induced oscillations of a fluid layer. IN: Sb. Prikl. i teor. fizika. Vyp. 4.

 Alma-Ata, 1972, 273-278. (RZhMekh, 8/74, #8B544)
- 50. Gol'dman, R. S., and M. S. Titov. <u>Problem of object discrimination by</u> reflected signals. Tekhnicheskaya kibernatika, no. 2, 1974, 197-202.

- 51. Gorbunov, Yu. A., and S. M. Losev. <u>Use of the Toros side-look radar</u> for drift ice studies. Trudy AANII, no. 316, 1974, 153-162.
- 52. Ivanenkov, G. V. <u>Vortex generation on the surface of a tideless sea at boundary layers.</u> FAiO, no. 7, 1974, 752-762.
- 53. Ivanenkov, G. V., and Ye. V. Borisov. Spectrum of vortex currents on the sea surface in the circumlittoral boundary layer. FAiO, 1974, 1006-1009.
- 54. Ivanov, V. F., and A. S. Sarkisyan. <u>Comparison of diagnostic and prognostic calculations of currents in the South Atlantic Ocean</u>. Meteorologiya i gidrologiya, no. 8, 1974, 71-79.
- 55. Ivanov, Yu. A., and Ye. G. Morozov. <u>Deformation of internal gravity</u> waves by a flow with horizontal velocity shift. Okeanologiya, no. 3, 1974, 457-461.
- 56. Kadomtsev, B. B., and V. M. Kontorovich. Theory of turbulence in hydrodynamics and plasmas. IVUZ Radiofiz, no. 4, 1974, 511-540.
- 57. Kalatskiy, V. I. Some analytical solutions to the furbulent energy balance equation. FAiO, no. 8, 1974, 900-904.
- 58. Karabasheva, E. Z., N. G. Kozhelupova, Yu. Z. Miropol'skiy, V. T. Paka, and B. N. Filyushkin. Some data on the spatial structure of internal wave fields in the ocean. Okeanologiya, no. 3, 1974, 462-467.
- 59. Kats, A. V. Theory of weak turbulence. IVUZ Radiofiz, no. 4, 1974, 630.
- 60. Kevlishvili, T. P., G. F. Liman, and N. A. Mikhaylova. Study of the Langrangian turbulence characteristics of a suspension-carrying flow. Meteorologiya i gidrologiya, no. 6, 1974, 47-53.

- 61. Khlopov, V. V. Horizontal turbulent exchange in the Northeast Atlantic (from data of field test studies in 1971-1972). Trudy AANII, no. 315, Leningrad, 1974, 27-35.
- 62. Khlopov, V. V. Vertical heat flows in the upper oceanic layer (from data of field test observations). Trudy AANII, no. 315, Leningrad, 1974, 36-40.
- 63. Khodarev, Yu. K., G. A. Avanesov, B. S. Dunayev, Ya. L. Liman, and Yu. M. Chesnokov. <u>Use of space technology to study earth resources and control of its environment</u>. Aircraft experiment. Meteorologiya i gidrologiya, no. 4, 1974, 25-29.
- 64. Khudasko, V. V. Nestationarnoye turbulentnoye techeniy neszhimayemoy zhidkosti (Nonstationary turbulent flow of an incompressible fluid). Obninsk, 1973, 27 p. (KLDV, 5/74, #8643)
- 65. Klimek, V. I., V. P. Kochergin, and A. S. Sarkisyan. Study of bottom relief effect and β-effect on current dynamics in the ocean. FAiO, no. 10, 1974, 1113-1118.
- 60. Klyukin, I. I. Zvuk i more (Sound and the sea). Leningrad, Sudostroyeniye, 1974, 239 p. (RZhF, 7/74, #7Zh652 K)
- 67. Kofanov, Ye. S., N. K. Shelkovnikov, A. A. Pivovarov, and Yu. I. Gorbatov Method and measuring system for study of the structure of small-scale sea turbulence. VMU, no. 2, 1974, 171-177.
- 68. Kogan, Z. N., and N. P. Shakina. Nonlinear problem of internal waves in a stratified jet flow. IN: Tr. Tsentr. aerol. observ., no. 112, 1973, 60-72. (RZhMekh, 5/74, #5B937)
- 69. Kogan, Z. N., and N. P. Shakina. <u>Finite-amplitude waves in a stratified jet flow, and clear air turbulence.</u> FAiO, no. 4, 1974, 333-343.

- 70. Kononkova, G. Ye., L. V. Poborchaya, T. I. Karusheva, T. P. Petrovskaya, K. V. Pokazeyev, and V. A. Razumov. Effect of turbulent flow on wind waves. Vod. resursy, no. 1, 1974, 179-183. (RZhGeofiz, 5/74, #8 V70)
- 71. Kordzadze, A. A. On the uniqueness of a solution to a problem in ocean dynamics. DAN SSSR, v. 219, no. 4, 1974, 856-859.
- 72. Korneva, L. A., and A. K. Kuklin. <u>Development of a procedure for determination of the mean level in the case of an irregular wave in the sea.</u> All UkrSSR. MGI.Voprosy fiziki morya, Sevastopol', 1972, 41-49.
- 73. Korzun, V. A. Apparatus for high-latitude mapping of the ocean. Ekspress informatsiya. Promyslovaya okeanologiya, no. 4, 1974, 1-22.
- 74. Kreyman, K. D. Experimental measurements of current velocity and turbulence profiles in the friction layer. Trudy AANII, no. 315, Leningrad, 1974, 116-119.
- 75. Krivoshey, M. I. <u>Laboratory and theoretical studies of propagation of an axially-symmetrical jet in the presence of density stratification</u>. IN: Sb. Gidrofizicheskiye issled. ozer. Leningrad, Nauka, 1973, 116-132. (RZhMekh, 5/74, #53465)
- 76. Kuchumova, L. S., V. V. Khlopov, and O. I. Sheremetevskaya. <u>Heat</u>
 balance and its role in the change of temperature of the surface oceanic layer.
 IN: Trudy AANII, no. 315, Leningrad, 1974, 41-52.
- 77. Kurdyumova, N. V. <u>Application of the method of disturbed boundary</u>
 <u>conditions to the solution of an axially symmetric problem in hydrodynamics.</u>
 IN: Trudy LKI, no. 84, 1974, 50-53. (RZhMekh, 10/74, #10B550)

- 78. Kuznetsov, O. A., and G. N. Panin. <u>Effect of a surface oil film on turbulence in the near-water atmospheric layer</u>. Meteorologiya i gidrologiya, no. 5, 1974, 97-99.
- 79. Lande, B. Sh. On a theory for determining parameters of sea surface profile from radar reflections. IN: Tr. Sev. Zap. zaoch. politekhn. in-ta, no. 25, 1974, 8-10 (RZhF, 11/74, no. 11Zhl41)
- 80. Larichev, V. D. <u>Formulation of an internal boundary value problem for the Rossby wave equation (problem of wave recording by coastal pressure tide gauge)</u>. FAiO, no. 7, 1974, 763-770.
- 81. Leonov, A. I., and Yu. Z. Miropol'skiy. Nonlinear theory of propagation of stationary internal gravity waves. MZhiG, no. 5, 1974, 189-190.
- 82. Leonov, A. I., and Yu. Z. Miropol'skiy. Stationary internal gravity waves with finite amplitude. DAN SSSR, v. 218, no. 6, 1974, 1287-1290.
- 83. Leonov, A. I., and Yu. Z. Miropol'skiy. Nonlinear internal gravity waves in a steady-state mode. Okeanologiya, no. 3, 1974, 575-576.
- 84. Lineykin, P. S. (ed). Okeanologicheskiye raschety i prognozy (Oceanological calculations and forecasts). Tr. Vses. konf. molodykh uchenykh GMS SSSR. Leningrad, Gidrometeoizdat, 1972, 111 p. (LC-VKP)
- 85. Liverdi, V. P. A method for estimating the energy of sea waves. AN UkrSSR. MGI, Voprosy fiziki morya, Sevastopol', 1972, 50-55.
- 86. Lobach, V. T. Possibility of determining the average length and principal propagation direction of sea waves by radar. Trudy Taganrog r-t inta, no. 39, 1970, 16-22. (RZhF, 6/74, #6Zh418)

- 87. Lyakhov, V. K. <u>Hydraulic resistance</u>, heat and mass transfer in a turbulent flow past a slightly rough surface. I-FZh, v. 26, no. 1, 1974, 97-103.
- 88. Lyamshev, L. M., M. G. Puzino, and S. A. Salosina. Characteristics of pressure flu tuations during distributed suction of a turbulent boundary layer. Akusticheskiy zhurnal, no. 5, 1974, 733-737.
- 89. Lyamshev, L. M., S. A. Salosina, and A. G. Shustikov. Effect of discrete fluid suction on pressure pulsations in a turbulent boundary layer. DAN SSSR., v. 217, no. 1, 1974, 44-47.
- 90. Lyamshev, L. M., S. A. Salosina, and A. G. Shustikov. Pressure pulsations in a turbulent boundary layer during discrete fluid suction.

 Akusticheskiy zhurnal, no. 3, 1974, 435-442.
- 91. Maderich, V. S. <u>Vertical structure of the main oceanic thermocline</u>. Meteorologiya i gidrologiya, no. 10, 1974, 67-74.
- 92. Mal'tsev, S. V. Role of density flows in water circulation and stratification in estuarine regions. Trudy GOIN, no. 118, 1974, 24-30. (RZhMekh, 10/74, #10B611)
- 93. Man'kovskiy, V. I. Extremal indicatrices of light scattering by sea water. IN: Sb. Mor. gidrofiz. issled., no. 3(62), Sevastopol', 1973, 100-108. (RZhF, 6/74, #6D953)
- 94. Marchuk, G. I. Chislennoye resheniye zadach dinamiki atmosfery i okeana na osnove metodov rasshchepleniya (<u>Numerical solution of problems</u> of atmosphere and ocean dynamics based on branching methods). Gidrometeoizdat, 1974, 14 p. (NK, 4/74, #100)

- 95. Matveyev, D. T., Yu. A. Volkov, A. P. Kestner, and S. O. Lomadze.

 Measurement of slope characteristics of a disturbed sex surface by remote
 microwave sounding. IN: Sb. TROPEKS-72. Lening: ad, Gidrometeoizdat,
 1974, 540-547. (RZhGeofiz, 8/74, #8 V73)
- 96. Mikhaylov, Yu. D. Statistical characteristics of a turbulent field of current velocities and their estimate in the circumlittoral zone of the Baltic Sea. Trudy GOIN, no. 122, 1974, 90-107. (RZhMekh, 10/74, #10B608)
- 97. Mircpol'skiy, Yu. Z. Propagation of internal waves in the ocean with horizontal inhomogeneities in the density field. FAiO, no. 5, 1974, 519-532.
- 98. Mogilko, V. A., and Yu. A. Shcherbina. A new characteristic of the structure of turbulent pulsations. Tr. 18-y Nauch. konf. Mosk. fiz.-tekhn. in-t, 1972. Ser. Aeromekhanika. Protsessy upr. Dolgoprudnyy, 1973, 31-36. (RZhMekh, 4/74, #4B1039)
- 99. Molebnyy, V. 7. Remote device for measuring the orientation of sea surface facets. Othr izobr, no. 23, #433339, 1974, 100.
- 100. Mozgunov, G. I. Scale calculation for prevailing turbulent disturbances in an unbounded flow. IN: Sb. Meteorologiya, klimatologiya i gidrologiya, no. 10, 1974, 156-158.
- 101. Navrotskiy, V. V. Amplitude structure of velocity and temperature fluctuations in the upper oceanic layer. FAiO, no. 7, 1974, 771-781.
- 102. Nefedov, L. M. Transit time fluctuations of an impulse in the deep sea.

 Akusticheskiy zhurnal, no. 4, 1974, 645-647.
- 103. Neymark, Yu. I. Origin of stochasticity in dynamic systems. IVUZ Radiofiz, no. 4, 1974, 602-607.

- 104. Nikol'skiy, I. N., M. S. Rayzman, and A. P. Slutskiy. <u>Influence of parametric effects in complex thermal detectors on the accuracy of measurement of turbulent flow temperature.</u> Metrologiya, no. 10, 1974, 53-59.
- 105. Nozdrin, Yu. V. Effect of buoyancy force on spectra of turbulent processes in the ocean. Okeanologiya, no. 5, 1974, 797-801.
- 106. Okishev, V. B., S. V. Polozhentsev, and I. A. Podval'nyy. Depth dependence of the accuracy of measurement of sea wave height by a radio method. Trudy Taganrog r-t in-ta, no. 39, 1973, 36-38. (RZhF, 6/74, #6Zh152)
- 107. Ordanovich, A. Ye., and V. N. Ivanov. <u>Problem of parametrization of turbulent exchange in the Ekman boundary layer.</u> Meteorologiya i gidrologiya, no. 6, 1974, 26-32.
- 108. Ozmidov, R. V. <u>Turbulence in the ocean.</u> Zemlya i Vselennaya, no. 1, 1974, 9-16. (RZhMekh, 8/74, #8B556)
- 109. Popov, A. I. Effect upon turbulence measurement of nonuniform sensitivity distribution over a hot-wire anemometer. I-FZh, v. 26, no. 5, 1974, 832-838.
- 110. Popov, O. I., and Ye. O. Fedorova. Comparison of experimental and calculated spectra of ascending thermal emission in the 4-5 micron range. FAiO, no. 4, 1974, 431-434.
- 111. Predvaritel'nyye rezul'taty ekspeditsii "Bering". Sbornik statey (<u>Preliminary</u> results of the Bering expedition. Collection of articles). Leningrad, 1973, ll2 p. (KLDV, 7/74, #13380)

- 112. Pukhnachev, V. V. Smoothness of stationary solutions to the Napier-Stokes equation near a free boundary. IN: Sb. Dinamika spiosh. sredy, no. 15, Novosibirsk, 1973, 133-144. (RZhMekh, 8/74, #8B656)
- 113. Rabinovich, M. I. <u>Seif-osciliations of distributed systems</u>. IVUZ Radiofiz no. 4, 1974, 477-510.
- 114. Radchenko, N. F., and V. L. Faranov. Recording system for counting ocean gravity waves. Othr izobr, no. 20, #430408, 1974, 129.
- 115. Reykhrudei', A. E., and N. I. Apekisheva. <u>Kinematics of a solitary wave above various underlying surfaces</u>. Trudy SKNII, no. 32, 1973, 188-198. (RZhGeofiz, 8/74, #8B77)
- 116. Rossov, V. V., V. S. Richardson, and V. V. Knysh. <u>Current structure</u> in the northern part of the Straits of Florida. FAiO, no. 4, 1974, 400-410.
- 117. Rozhkov, V. A. (ed.) Veroyatnostnyy analiz okeanologicheskikh protsessov (Probability analysis of oceanological processes). Leningrad, Gidrometeoizdat, 1974, i41 p. (KL, 34/74, #28306)
- 118. Rozhkov, V. A. <u>Probability analysis of oceanological processes as nonstationary and nonuniform random functions</u>. Trudy GOIN, no. i22, 1974, 5-21. (RZhMekh, 10/74, #10B607)
- 119. Rudenko, O. B., S. I. Soluyan, and R. V. Khokhlov. <u>Problems in the theory of nonlinear acoustics</u>. Akusticheskiy zhurnal, no. 3, 1974, 449-457.
- 120. Rybnikov, A. A. (ed). Izmenchivost' okeanograficheskikh poiey i globai'nyye nabiyudeniya v okeane (Variabiiity of oceanographic field and globai observations in the ocean). Trudy GOIN, Vyp. 119. Moskva, Gidrometeoizdat, Mosk. otd-niye, 1974, 134 p.

- 121. Sabinin, K. D., and A. N. Serikov. Some results of measurements of space-time characteristics of short-period internal waves in the tropical Atlantic. FAiO, no. 10, 1974, 1062-1074.
- 122. Samodurov, A. S. Plane nonlinear gravity waves in a stratified fluid. FAiO, no. 8, 1974, 904-906.
- 123. Sarkisyan, A. S. <u>Problem formulationand calculation scheme for equatorial currents</u>. IN: Sb. AN UkrSSR. MGI Novyye modeli i rezul⁴taty rascheta techeniy v baroklinnom okeane, Sevastopol, 1967, 5-21.
- 124. Sarkisyan, A. S., and A. A. Serebryakov. Results of approximate calculations of the Lomonosov undercurrent. Ibid., 21-30.
- 125. Savin, M. T. Oscillations at the Vaisslaa frequency in the field of a geostrophical current. Meteorologiya i gidrologiya, no. 5, 1974, 94-97.
- 126. Selyuk, N. I. <u>Conversion of turbulent energy in a flow with displacement.</u>
 IN: Sb. Probl. okhrany i ispol'z. vod. Vyp. 2. Khar'kov, 1973, 126-133.
 (RZhMekh, 4/74, #4B1030)
- 127. Shabrin, A. N. Ellipsoid of turbulent stresses in a fluid. IN: Sb.

 AN UkrSSR. IG. Gidromekhanika. Vyp. 26. Kiyev, Naukova Dumka, 1974,
 37-41.
- 128. Shelkovnikov, N. K. <u>Techniques for studying the structure of turbulent flows</u>. VMU, no. 2, 1974, 205-209.
- 129. Sherstyuk, A. N. Turbulentnyy pogranichnyy sloy. (Poluempiricheskaya teoriya). [Turbulent boundary layer. (Semiempirical theory)]. Moskva, Energiya, 1974, 272 p. (RZhMekh, 8/74, #8B758 K)

- 130. Shifrin, K. S. Effect of wind on effective sea radiation. FAiO, no. 7, 1974, 803-805.
- 131. Shuleykin, V. V. (ed). Voprosy fiziki morya (Problems of physics of the sea,. AN UkrSSR. MGI Sevastopol', 1972, 116 p. (LC-VKP)
- 132. Sidorko, I. V., O. D. Tokarev, and A. T. Turovets. <u>Thermistor sensor</u> of flow velocity, Vestn. Kiyev. politekhn. in-ta. Ser. priborostr. no. 4, 1973, 23-25. (RZhMekh, 7/74, #7B1182)
- 133. Sitnikov, L. S. Status and problems of experiment automation in oceanology. Avtometriya, no. 4, 1974, 22-31.
- 134. Sokolov, B. I. <u>Calculation of stratified currents (two-dimensional problem)</u>. IN: Sb. Nauch. issledovaniya po gidrotekhn. v. 1972 g. T. 1. Leningrad, 1973, 312-313. (RZhMekh, 5/74, #5B493)
- 13%. Sosinovich, V. A., and T. L. Perel'man. Closure problem in the theory of uniform turbulence at the level of finite-dimensional distribution functions.

 DAN BSSR, no. 10, 1974, 892-895.
- 136. Soskin, I. M. (ed). Voprosy gidrologii i meteorologii okeanov. Sbornik statey (Problems of hydrology and meteorology of the oceans. Collection of articles). Leningrad, Gidrometeoizdat, 1974, 186 p. (KL, 35/74, #29238)
- 137. Sosunov, A. S., and V. T. Lobach. <u>Distribution moments of a radio</u>
 signal reflected from a statistically uneven surface. IN: Trudy Taganroy
 r-t in-ta, no. 39, 1973, 3-7. (RZhF, 6/74, #6Zhl47)

- 138. Sustavov, Yu. V., and Yu. P. Klevantsov. <u>Internal waves as a non-stationary probability process</u>. Recommendations for calculating the stability of stratified flow under the action of surface waves. IN: Sb. Nauch. issledovaniya po gidrotekhn. v. 1972 g. T. 1. Leningrad, 1973, 330. (RZhMekh, 5/74, #5B494)
- 139. Timokhin, A. A. <u>Possibility for height measurement of sea waves using phase fluctuations of reflected radio signal.</u> IN: Trudy Taganrog r-t in-ta, no. 39, 1973, 12-15. (RZhF, 6/74, #6Zhl49)
- 140. Timokhin, A. A. Profiling of a statistically nonuniform surface. Ibid., 23-26. (RZhF, 6/74, #6Zh150)
- 141. Timonov, V. V., and I. T. Zamkov. <u>Problem of increasing the accuracy of Doppler true air speed indicators while flying over the sea</u>. Ibid., 44-49. (RZhF, 6/74, #6Zhl53)
- 142. Titov, V. B. Some results of performance tests for current meters of the BPV and EST types. Trudy AANII, no. 315, Leningrad, 1974, 120-138.
- 143. Trapeznikov, Yu. A. Study of two-dimensional spectral density of sea waves from records of disturbed surface at several points. Trudy GOIN, no. 122, 1974, 47-58. (RZhMekh, 10/74, #10B604)
- 144. Trofimov, I. L. Effect of spatial inhomogeneities of the magnetotelluric field on its vertical distribution in the sea. GiA, no. 3, 1974, 560-563.
- 145. Troilin, V. N. <u>Determining the structure of the scattering matrix in the case of perpendicular irradiation of a surface.</u> Trudy Taganrog r-t in-ta, no. 39, 1973, 32-35. (RZhF, 6/74, #6Zhl51)

- 146. Tseytlin, N. M., A. M. Shutko, and G. M. Zhislin. Radioizlucheniye morya na santimetrovykh volnakh i ego fluktuatsii (Radio emission from the selection. AN SSSR. Preprint No. 6 (155). Moskva, 1974, 52 p. (RZhF, 7/74, #7Zh233) (No text)
- 147. Tushinskiy, S. G. Experimental study of horizontal turbulent diffusion in southern Baykal. VMU. Geografiya, no. 5, 1973, 68-73. (RZhMekh, 4/74, #4B594)
- 148. Vasil'yev, O. F., B. G. Kuznetsov, Yu. M. Lytkin, and G. G. Chernykh.

 Development of a region of turbulized fluid in a stratified medium. MZhiG,
 no. 3, 1974, 45-52.
- 149. Vaysband, V. B., Ye. P. Noskov, and I. S. Podymov. <u>F4P-type platform</u> for mounting hydrometeorological instruments. Meteorologiya i gidrologiya, no. 7, 1974, 99-101.
- 150. Vil'khovchenko, S. D. Motion of a deformable contour in the flow of a perfectly incompressible fluid with constant vorticity. MZhiG, no. 3, 1974, 152-154.
- 151. Vinogradov, V. V., L. V. Mironov, Yu. I. Popov, and V. V. Ukrainskiy.

 Results of measuring water surface temperature by infrared radiometer in the tropical Atlantic. IN: Sb. TROPEKS-72, Leningrad, Gidrometeoizdat, 1974, 609-619. (RZhGeofiz, 8/74, #8B82)
- 152. Vishik, M. I., and A. V. Fursikov. Analiticheskiye pervyye integraly uravneniya Byurgersa, sistemy Nav'ye-Stoksa i ikh prilozheniya (Analytic first integrals of the Buergers equation of the Napier-Stokes system and their applications). (In-t probl. mekh. AN SSSR Preprint No. 35). Moskva, 1974, 62 p. (RZhMekh, 8/74, #8B655)

- 153. Vo Van Lan', and A. A. Pivovarov. Calculation of annual variation in turbulent exchange and water temperature in the sea. FAiO, no. 9, 1974, 976-984.
- 154. Volkov, Yu. A., L. G. Yelagina, and B. M. Koprov. <u>Spectral</u> characteristics of turbulent exchange between the ocean and atmosphere in the tropical Atlantic. FAiO, no. 6, 1974, 619-627.
- 155. Volosov, V. M. Asymptotic analysis of one type of nonlinear gravity-gyroscopic internal waves. Okeanologiya, no. 4, 1974, 589.
- 156. Voyt, S. S., and B. I. Sebekin. <u>Different generation mechanisms of nonstationary long waves in the ocean.</u> IN: Trudy SKNII, no. 32, 1973, 27-33. (RZhGeofiz, 7/74, #7V85)
- 157. Yakubenko, V. G., V. P. Nikolayev, O. I. Prokopov, A. A. Zhil'tsov, and L. M. Næsterenko. Fluctuations of brightness of an underwater optical field. FAiO, no. 10, 1974, 1009-1013.
- 158. Yanshev, I. K. Numerical calculation of two-dimensional potential and vortical currents of a perfect fluid. IN: Sb. Chisl. metody mekh. splosh. sredy. T. 4. No. 5. Novosibirsk, 1973, 147-155. (RZhMekh, 7/74, #7B445)
- 159. Yeremenko, Ye. V., and V. I. Karas'. <u>Differential equations for the integral scales in a semiempirical theory of turbulence</u>. DAN UkrSSR. Ser. A, no. 8, 1974, 735-739.
- 160. Yeremenko, Ye. V., and V. I. Karas'. <u>Use of turbulence scales in the calculation of turbulent flows with displacement</u>. IN: Sb. Probl. okhrany i ispol'z. vod. Vyp. 3. Khar'kov, 1973, 105-113. (RZhMekh, 8/74, #8B936)
- 161. Zagorodnikov, A. A. <u>Using artifical earth satellites to measure</u> waves. FAiO, no. 7, 1974, 791-798.

- 162. Zaslavskiy, M. M., and L. G. Lobysheva. <u>Interaction of wave disturbances of the near-water atmospheric layer with energy-carrying turbulence.</u>
 DAN SSSR, v. 216, no. 3, 1974, 532-535.
- 163. Zel'dis, V. I., A. D. Rozenberg and V. G. Ruskevich. <u>Study of fluctuation characteristics of acoustic signals scattered by a disturbed water surface.</u>
 Akusticheskiy zhurnal, no. 3, 1974, 402-408.
- 164. Zhigulev, V. N. Stability of the Millionshchikov-Loytsyanskiy solution for isotropic turbulence. IN: Sb. Chisl. metody mekh. splosh. sredy T. 4. No. 4. Novosibirsk, 1973, 30-36. (RZhMekh, 5/74, #5B916)
- 165. Zhmurov, Ye. A. Probability of false alarms in a matrix receiver during strobing. Trudy Taganrog r-t in-ta, no. 39, 1973, 66-74. (RZhRadiot, o/74, #6G50)
- 166. Zimont, V. L., and A. I. Mal'tsev. Eksperimental'noye issledovaniye turbulentnogo smesheniya sputnykh neizotermicheskikh struy pri nalichii prodol'nogo gradiyenta davleniya. Raschet sputnykh turbulentnykh neizotermicheskikh techeniy pri nalichii prodol'nogo gradiyenta davleniya (Experimental study of turbulent mixing of adjoining nonisothermic jets in the presence of a longitudinal pressure gradient. Calculation of adjoining nonisothermic currents in the presence of a longitudinal pressure gradient). Moskva, 1974, 35 p. (KL, 41/74, #34711)
- 167. Zotov, Ye. M. <u>Underwater noise in the infrasonic frequency range in a turbulent flow.</u> IN: Sb. AN UkrSSR. MGI.Voprosy fiziki morya. Sevastopol', 1972, 94-99. (LC)

SOURCE ABBREVIATIONS

| AiT | • | Avtomatika i telemekhanika |
|------------|-----|--|
| APP | • | Acta physica polonica |
| DAN ArmSSR | • | Akademiya nauk Armyanskoy SSR. Doklady |
| DAN AzSSR | • | Akademiya nauk A zrijaydahanakoy SSR. Doklady |
| DAN BSSR | • | Akademiya nauk Belorusskoy SSR. Doklady |
| DAN SSSR | • | Akademiya nauk SSSR. Doklady |
| DAN TadSSR | • | Akademiya nauk Tadzhikskoy SSR. Doklady |
| DAN UkrSSR | • | Akademiya nauk Ukrainskoy SSR. Dopovidi |
| DAN Uzbssr | • | Akajemiya nauk Uzbekskoy SSR. Doklady |
| DBAN | • | Bulgarska akademiya na naukite. Doklady |
| EOM | • | Elektronnaya obrabotka materialov |
| FAIO | • | Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana |
| FGIV | • | Fizika goreniya i vzryva |
| FiKhOM | • | Fizika i khimiya obrabotka materialov |
| F-KhMM | • | Fiziko-khimicheskaya mekhanika materialov |
| FMIM | • | Fizika metallov i metallovedeniye |
| FTP | • ; | Fizika i tekhnika poluprovodnikov |
| FTT | • | Fisika tverdogo tela |
| FZh | • | Fiziologicheskiy zhurnal |
| GIA | • | Geomagnetizm i aeronomiya |
| GiK | • 8 | Geodesiya i kartografiya |
| IAN Arm | • | Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika |
| IAN As | • | Akademiya nauk Azerbaydzhanskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk |

| IAN B | | Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk |
|------------------|---|--|
| IAN Biol | • | Akademiya nauk SSSR. Izvestiya. Seriya biologicheskaya |
| IAN Energ | - | Akademiya nauk SSSR. Izvostiya. Enorgetika i transport |
| IAN Est | • | Akademiya nauk Estonskoy SSR. Izvestiya. Fizika matematika |
| IAN Fiz | • | Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya |
| IAN Fizika zemli | • | Akademiya nauk SSSR. Izvestiya. Fizika zemli |
| IAN Kh | • | Akademiya nauk SSSR. Izvestiya. Seriya khimicheskaya |
| IAN Lat | • | Akademiya nauk Latviyskoy SSR. Izvestiya |
| IAN Met | • | Akademiya nauk SSSR. Izvestiya. Motally |
| IAN Mold | • | Akademiya nauk Moldavskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk |
| IAN SO SSSR | • | Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya |
| IAN Tadzh | • | Akademiya nauk Tadzhiksoy SSR. Izvestiya. Otdeleniye fiziko-matematicheskikh i geologo- khimicheskikh nauk |
| IAN TK | • | Akademiya nauk SSSR. Izvestiya. Tekhni- cheskaya kibernetika |
| IAN Turk | • | Akademiya nauk Turkmenskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh, i geologicheskikh nauk |
| IAN Uzb | • | Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk |
| IBAN | • | Bulgarska akademiya na naukite. Fizicheski institut. Izvestiya na fizicheskaya institut s ANEB |
| I-FZh | • | Inzhenerno-fizichoskiy zhurnal |

| IiR | • | Izobretatel' i ratsionalizator |
|------------------|-----|---|
| ILEI | • | Leningradskiy elektrotekhnicheskiy institut. Isvestiya |
| IT | • | Ismeritel'naya tekhnika |
| IVUZ Avia | • | Izvestiya vysshikh uchebnykh zavedeniy. Aviatsionnaya tekhnika |
| IVUZ Cher | • | Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya |
| IVUZ Energ | • | Izvestiya vysshikh uchebnykh zavedeniy. Enorgetika |
| IVUZ Fiz | • | Izvestiya vysskikh uchebnykh ravedeniy. Fizika |
| IVUZ Geod | • | Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos''yemka |
| IVUZ Geol | • | Izvestiya vysshikh uchebnykh zavedeniy. Geologiya i razvedka |
| IVUZ Gorn | • | Isvestiya vysshikh uchebnykh zavedeniy. Gornyy zhurnal |
| IVUZ Mash | • | Isvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye |
| IVUZ Priboro | - | Isvestiya vysshikh uchebnykh savedeniy. Priborostroyeniye |
| IVUZ Radioelektr | - | Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika |
| IVUZ Radiosiz | • | Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika |
| IVUZ Stroi | • | Izvestiya vysskikh uchebnykh zavedeniy. Stroitel'stvo i arkhitektura |
| KhVE | • ' | Khimiya vysokikh energiy |
| KiK | • | Kinetika i katalis |
| KL | • | Knishnaya letopis' |
| Kristall | • | Kristallografiya |
| KSpF | • | Kratkiye soobshcheniya po fizike |

| LZhS | • | Letopis' zhurnal'nykh statey |
|------------|---|--|
| MIT'OM | • | Metallovedeniye i termicheskaya obrahotka materialov |
| MP | • | Mekhanika polimerov |
| MTT | • | Akademiya nauk SSSR. Izvestiya. Mekhanika tverdogo tele |
| MZhiG | • | Akademiya nauk SSSR. Izvestiya. Mekhanika shidkosti i gaza |
| NK | • | Novyye knigi |
| NM | • | Akademiya nauk SSSR. Izvestiya. Neorgan-icheskiye materialy |
| NTO SSSR | • | Nauchno-tekhnicheskiye obshchestva SSSR |
| ois | • | Optika i spektroskopiya |
| OMP | • | Optiko-mekhanicheskaya promyshlennost' |
| Otkr isobr | • | Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye snaki |
| PF | • | Postepy fizyki |
| Phys abs | • | Physics abstracts |
| PM | • | Prikladnaya mekhanika |
| PMM | • | Prikladnaya matematika i mekhanika |
| PSS | • | Physica status solidi |
| PSU | • | Pribory i sistemy upravleniya |
| PTE | • | Pribory i tekhnika eksperimenta |
| Radiotekh | • | Radiotekhnika |
| RIE | • | Radiotekhnika i elektronika |
| RZhAvtom | • | Referativnyy shurnal. Avtomatika, tele- mekhanika i vychislitel'nayn tekhnika |
| RZhElektr | • | Referativnyy shurnal. Elektronika i yeye primeneniye |

| RZhF | | Referativnyy zhurnal. Fizika |
|-------------|----------|--|
| RZhFoto | - | Referativnyy zhurnal. Fotokinotekhnika |
| R.Z.h.Ge od | - | Referativnyy zhurnal. Geodeziya i aeros"- yemka |
| RZhGeofiz | - | Referativnyy zhurnal. Geofizika |
| RZhInf | - | Referativnyy zhurnal. Informatics |
| RZhKh | • | Referativnyy zhurnal. Khimiya |
| RZhMekh | • | Referativnyy zhurnal. Mekhanika |
| RZhMetrolog | - | Referativnyy zhurnal. Metrologiya i izmer- itel'naya tekhnika |
| RZhRadiot | - | Referativnyy zhurnal. Radiotekhnika |
| SovSciRev | - | Soviet science review |
| TiEKh | • | Teoreticheskaya i eksperimental'naya khimiya |
| TKIT | • | Tekhnika kino i televideniya |
| TMF | • | Teoreticheskaya i matematicheskaya fizika |
| TVT | • | Teplofizika vysokikh temperatur |
| UFN | • | Uspekhi fizicheskikh nauk |
| UFZh | • | Ukrainskiy fizicheskiy zhurnal |
| UMS | - | Ustalost' metallov i splavov |
| UNF | | Uspekhi nauchnoy fotografii |
| VAN | • | Akademiya nauk SSSR. Vestnik |
| VAN BSSR | • | Akademiya nauk Belorusskoy SSR. Vestnik |
| VAN KazSSR | • | Akademiya nauk Kazakhskoy SSR. Vestnik |
| VBU | • | Belorusskiy universitet. Vestnik |
| VNDKh SSSR | • | VNDKh SSSR. Informatsionnyy byulleten' |
| VLU | • | Leningradskiy universitet. Vestnik. Fizika, khimiya |
| VMU | • | Moskovskiy universitet. Vestnik. Seriya, fizika, astronomiya |

| | ZhETF | • | Zhurnal eksperimental'noy i teoreticheskoy fiziki |
|---|----------|---|--|
| 1 | ZhETF P | • | Pis'ma v Zhurnal eksperimental'noy i teoret- icheskoy fiziki |
| | ZhFKh | • | Zhurnal fizicheskoy khimii |
| I | ZhNiPFiK | • | Zhurnal nauchnoy i prikladnoy fotografii i kinematografii |
| Ī | ZhNKh | - | Zhurnal neorganicheskoy khimii |
| | ZhPK | • | Zhurnal prikladnoy khimii |
| | ZhPMTF | - | Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki |
| | ZhPS | • | Zhurnal prikladnoy spektroskopii |
| | ZhTF | • | Zhurnal tekhnicheskoy fiziki |
| • | ZhVMMF | • | Zhurnal vychislitel'noy matematiki i matemat- icheskoy fiziki |
| | ZL | - | Zavodskaya laboratoriya |
| | | | |